

elasticity material such as thermoplastic polyurethane (TPU), to the material. By providing reinforcement to the upper support portion, the wearer's breasts are provided with additional support beyond that provided by, for instance, a shoulder strap. In exemplary aspects, the reinforcement material may vary in elasticity to provide gradient support in the lock down area. Similarly, the lower support portion may be reinforced by applying a high modulus of elasticity material to this area of the support garment to provide additional support to the under portions of a wearer's breasts when the support garment is worn.

[0018] Having the breast cups with support and lock down portions (upper support and lower support portions) integrated into, for instance, a single layer of material provides several advantages. For instance, support can be localized to those areas that need more support instead of compressing the entire chest area which may be uncomfortable for the wearer and restrict movement. Moreover, providing support as described eliminates the need for underwires which may cause discomfort by pressing uncomfortably into the wearer's flesh. Integrating the support into a single layer of material also helps to make the support garment lightweight, less bulky and helps to provide a smoother, more aesthetic appearance. Further, the openings in the upper and lower support portions help to make the support garment more breathable and flexible. Additionally, integrating the support and lock down areas and bra cup portions into a single layer of material provides easier and simpler construction and manufacture.

[0019] Accordingly, aspects herein are directed to a support garment comprising A support garment comprising at least a first layer of material having a first surface and a second surface opposite the first surface, where the first layer of material forms at least a breast cup portion, an upper support portion positioned superior to the breast cup portion when the support garment is worn, and a lower support portion positioned inferior to the breast cup portion when the support garment is worn. The upper support portion comprises a first structural configuration comprising a first plurality of openings in the first layer of material, and the lower support portion comprises a second structural configuration comprising a second plurality of openings in the first layer of material.

[0020] In another aspect, aspects herein are directed to a bra comprising at least a first layer of material having a first surface and a second surface opposite the first surface, where the first layer of material forms at least a front portion adapted to cover a wearer's breasts and at least a portion of the wearer's torso when the bra is in an as-worn configuration. The front portion comprises a pair of breast cup portions, and at least one upper support portion located superior to the pair of breast cup portions comprising a first structural configuration comprising a first plurality of openings in the first layer of material.

[0021] In yet another aspect, a support garment made by the following process is provided. The process comprises the steps of preparing a first layer of a material to form at least breast cup portions, an upper support portion positioned superior to the breast cup portions, and a lower support portion positioned inferior to the breast cup portions, where the first layer of material has a first surface and a second surface opposite the first surface. The process further comprises creating a first plurality of openings in the first layer of material at least at the upper support portion to create a

first structural configuration, manipulating a reinforcement material to have a shape corresponding to the first structural configuration, and applying the reinforcement material to the second surface of the upper support portion.

[0022] FIG. 1 illustrates a front perspective view of a wearer wearing a support garment in the form of a bra **100** with breast cup portions **112**, upper support portion **114** and lower support portion **116** in accordance with an aspect herein. While aspects discussed herein refer to bras, it will be understood that aspects are not limited to any particular style or type of support garment used to support breast tissue. For example, other support garments may include camisoles, swimwear or other garments with built-in support. Further, the depictions in the drawings are for exemplary purposes only and are in no way meant to limit the scope of the present invention. For instance, although the bra **100** is shown as a pull-over sport bra, the bra **100** may comprise more traditional style bras that include separate breast cups, front closures, back closures, removable shoulder straps, and the like.

[0023] The bra **100** comprises a front portion **110** including breast cup portions **112**, upper support portion **114** and lower support portion **116**. The bra **100** also comprises shoulder straps **115** adapted to extend over a wearer's shoulders when the bra **100** is worn, an under band **126** located under the breast cup portions **112** and adapted to encircle a torso area of the wearer when the bra **100** is worn, and a back portion **124** (shown in FIG. 2). The shoulder straps **115** may have a number of different configurations such as racerback, convertible, standard, and the like. The back portion **124** may be connected to the front portion **110** in part through the shoulder straps **115**. As well, the bra **100** may have a front closure, a back closure, or the bra **100** may be donned and doffed by pulling the bra **100** over the wearer's head.

[0024] The front portion **110** of the bra **100** is the portion of the bra **100** that covers a portion of the torso of the wearer including the wearer's breasts when the bra **100** is worn. More specifically, the breast cup portions **112** are adapted to cover the wearer's breasts when the bra **100** is worn. The breast cup portions **112** may be unstructured or they may be structured or constructed such that they conform generally to the shape of the wearer's breasts (i.e., molded cups). In one example, the breast cup portions **112** and/or other portions of the bra **100** may be lined with an optional inner second layer or internal facing layer (not shown) that comes in contact with the wearer's skin when the bra **100** is worn, and/or an optional external shell layer positioned on an external facing surface **120** of the bra **100** when the bra **100** is worn. In another example, the front portion **110** may comprise a single layer of material **132** having an external facing surface **120** that faces the external environment when the bra **100** is worn and an inner-facing surface (not shown) that faces the wearer's skin when the bra **100** is worn. Any and all aspects, and any variation thereof, are contemplated as being within aspects herein.

[0025] As shown in FIGS. 1 and 2, in one exemplary configuration, the breast cup portions **112**, the upper support portion **114**, and the lower support portion **116** may be integrally formed from the single layer of material **132** or together made up of the single layer of material **132**. In another aspect, the breast cup portions **112**, the upper support portion **114**, and/or the lower support portion **116**, may be made from separate pieces of material and attached